
IEC 61131-3 Ladder Diagram Symbols

by PLC Academy

NO Contact



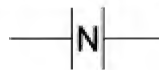
Positive Transition-Sensing Contact



NC Contact



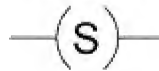
Negative Transition-Sensing Contact



Coil



SET Latch Coil



Positive Transition-Sensing Coil



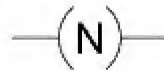
Negated Coil



RESET Latch Coil

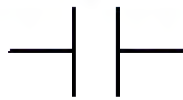


Negative Transition-Sensing Coil



Ladder diagram symbols

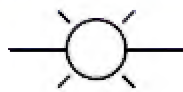
NO relay contact



NC relay contact



Indicator lamp



Heating element



NO pushbutton switch



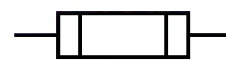
NC pushbutton switch



Overload heater



Fuse





Normally open contact

Passes power (ON) if coil driving the contact is ON

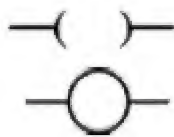
Allen-Bradley calls it **XIC** - e**X**amine **I**f **C**losed



Normally closed contact

Passes power (ON) if coil driving the contact is OFF

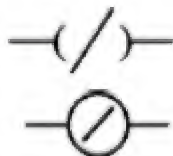
Allen-Bradley calls it **XIO** - e**X**amine **I**f **O**pen



Output or coil

If any left-to-right path of inputs passes power, output is ON

Allen-Bradley calls it **O**TE - **O**u**T**put **E**nergize



Not Output or coil

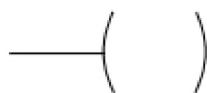
If any left-to-right path of inputs passes power, output is OFF



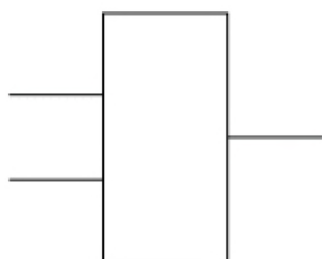
Normally Open
(NO)



Normally Closed
(NC)



Coil



Box

NO Contact



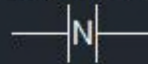
Positive Transition-Sensing Contact



NC Contact



Negative Transition-Sensing Contact



Coil



SET Latch Coil



Positive Transition-Sensing Coil



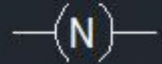
Negated Coil



RESET Latch Coil

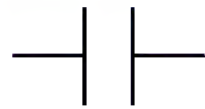


Negative Transition-Sensing Coil



Ladder diagram symbols

NO relay contact



NC relay contact



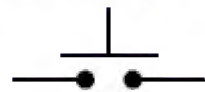
Indicator lamp



Heating element



NO pushbutton switch



NC pushbutton switch



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